

Indiana Department of Environmental Management

We make Indiana a cleaner, healthier place to live.

Frank O'Bannon Governor

Lori F. Kaplan Commissioner

September 16, 2003

100 North Senate Avenue P.O. Box 6015 Indianapolis, Indiana 46206-6015 (317) 232-8603 (800) 451-6027 www.in.gov/idem

TO: Interested Parties / Applicant

RE: Akron Foundry, Inc. / MSM 049-17893-00001

Paul Dubenetzky FROM:

Chief, Permits Branch Office of Air Quality

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-17-3-4 and 326 IAC 2, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-7-3 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, ISTA Building, 150 W. Market Street, Suite 618. Indianapolis, IN 46204, within eighteen (18) calendar days of the mailing of this notice. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- the date the document is delivered to the Office of Environmental Adjudication (OEA); (1)
- the date of the postmark on the envelope containing the document, if the document is mailed to (2)OEA by U.S. mail; or
- The date on which the document is deposited with a private carrier, as shown by receipt issued by (3) the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- the name and address of the person making the request; (1)
- (2) the interest of the person making the request;
- identification of any persons represented by the person making the request; (3)
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- identification of the terms and conditions which, in the judgment of the person making the request, (6) would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

> **Enclosures** FNPER-MOD.dot 8/11/03



September 16, 2003

Mr. David Ellenwood Akron Foundry, Inc. 502 East Main Street Akron, IN 46910

Re: 049-17893-00001

Minor Source Modification to: Part 70 permit No.: 049-5899-00001

Dear Mr. Ellenwood:

Akron Foundry, Inc. was issued Part 70 operating permit 049-5899-00001 on December 28, 1999 for a gray iron foundry. An application to modify the source was received on July 2, 2003. Pursuant to 326 IAC 2-7-10.5 the following are approved for construction at the source:

- (1) Remove one (1) portable rotolift.
- (2) Remove two (2) portable floor squeezers.
- (3) Replace these removed units with an automatic molding unit.

The following construction conditions are applicable to the proposed project:

General Construction Conditions

- 1. The data and information supplied with the application shall be considered part of this source modification approval. Prior to <u>any</u> proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Quality (OAQ).
- 2. This approval to construct does not relieve the permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.
- 3. <u>Effective Date of the Permit</u> Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.
- 4. Pursuant to 326 IAC 2-1.1-9 and 326 IAC 2-7-10.5(i), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.
- 5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.

Akron Foundry, IN. Page 2 of 2
Akron, IN MSM 049-17893-00001

Permit Reviewer: Iryn Calilung

6. Pursuant to 326 IAC 2-7-10.5(I) the emission units constructed under this approval shall not be placed into operation prior to revision of the sources Part 70 Operating Permit to incorporate the required operation conditions.

The source may begin construction when the minor source modification has been issued. Operating conditions shall be incorporated into the Part 70 operating permit as a minor permit modification in accordance with 326 IAC 2-7-10.5(I)(2) and 326 IAC 2-7-12.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter please call Iryn Calilung of my staff at (800) 451-6027 extension 3-5692, or (317) 233-5692.

Sincerely,

Paul Dubenetzky, Chief Permits Branch Office of Air Quality

Attachments - MSM and TSD cc: File - Fulton County

Fulton County Health Department

Fulton County Air Compliance Section Inspector

Compliance Data Section
Technical Support and Modeling

Part 70 Minor Source Modification OFFICE OF AIR QUALITY

Akron Foundry, Inc. 502 E. Main Street Akron, Indiana 46910

(herein known as the Permittee) is hereby authorized to construct subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 and 326 IAC 2-1-3.2 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Minor Source Modification 049-17893-00001	Sections Affected: A.2 and D.6
Issued by:Original signed by Paul Dubenetzky	Issuance Date: September 16, 2003
Paul Dubenetzky, Branch Chief Office of Air Quality	

Akron Foundry, Inc. Akron, Indiana Permit Reviewer: MES

SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in Conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a stationary grey iron foundry.

Responsible Official: David Ellenwood

Source Address: 502 E. Main Street, Akron, Indiana 46910 Mailing Address: 502 E. Main Street, Akron, Indiana 46910

SIC Code: 3370 County Location: Fulton

County Status: Attainment for all criteria pollutants

Source Status: Part 70 Permit Program

Minor Source, under PSD Rules

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)][326 IAC 2-7-5(15)] This stationary source consists of the following emission units and pollution control devices:

- (a) Two (2) electric induction furnaces, installed in 1997, capacity: 3.0 tons of metal per hour, each.
- (b) One (1) pouring and cooling operation, capacity: 6.00 tons of metal per hour and 10.66 tons of sand molds and cores per hour.
- (c) One (1) shakeout operation, capacity: 6.00 tons of metal per hour and 10.66 tons of sand molds and cores per hour.
- (d) One (1) grinding and finishing operation consisting of six (6)stationary grinders, three (3) installed in 1965, one (1) installed in1970 and two (2) installed in 1983, capacity: 6.00 tons of metal total, one (1) shot-blaster, installed in 1985, capacity: 6.00 tons of metal per hour, one (1) rotary tumbler, installed in 1967, capacity: 6.00 tons of metal per hour and one (1) shared baghouse for particulate matter control, exhausting through stack S-2.
- (e) One (1) sand handling operation consisting of one (1) muller installed in 1995, capacity: 21 tons of sand per hour, one (1) screenerator, installed in 1995, capacity: 21 tons of sand per hour, one (1) bucket elevator, installed in 1995, capacity: 21 tons of sand per hour, one (1) bucket loader, installed prior to 1995, capacity: 21 tons of sand per hour, wet sand conveyors, installed prior to 1995, capacity: 21 tons of sand per hour, one (1) sand and clay addition system, installed in 1995, capacity: 0.12 tons of sand and clay per hour and one (1) shared baghouse for particulate matter control, exhausting through stack S-2.
- (f) One (1) sand handling operation, known as E-3, consisting of one (1) Carrier auto vibrator shakeout, one (1) combination return sand storage bin with rotary screen, one (1) muller, one

Permit Reviewer: MES

(1) bucket elevator and one (1) conveyor, all equipped with a baghouse, known as C3, exhausted through stack S3, capacity: 48.0 tons of sand per hour.

Page 3 of 5

- One (1) used manual rotolift machine, known as E-4, equipped with a baghouse, known as (g) C3, exhausted through stack S3, capacity: 48.0 tons of sand per hour.
- One (1) used automatic molding machine BP 2620, known as E-4, equipped with a bag-(h) house, known as C3, exhausted through stack S3, capacity: 48.0 tons of sand per hour.
- One (1) core making operation consisting of three (3) manual shell machines, capacity: 100 (i) pounds of sand per hour each and 6.00 tons per hour of metal.
- Manual molding machines, consisting of one (1) rotolift, installed in 1984, and nine (9) (j) portable floor squeezers, installed between 1950 and 1975, capacity: 10.66 tons of sand per hour, each.
- One (1) automatic molding machine. (k)
- One (1) natural gas fired oil-sand core oven, rated at 0.100 million British thermal units per (l) hour, capacity: 96 pounds of sand, core oil, water and binders per hour, total.
- One (1) scrap and charge handling operation, capacity: 6.00 tons of iron per hour. (m)

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)]

[326 IAC 2-7-5(15)]

This stationary source does not currently have any insignificant activities, as defined in 326 IAC 2-7-1 (21) that have applicable requirements.

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

Akron, Indiana Permit Reviewer: MES

SECTION D.6 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

- (i) One (1) core making operation consisting of three (3) manual shell machines, capacity: 100 pounds of sand per hour each and 6.0 tons per hour of metal.
- (j) Manual molding machines, consisting of one (1) rotolift, installed in 1984, and nine (9) portable floor squeezers, installed between 1950 and 1975, capacity: 10.66 tons of sand per hour, each.
- (k) One (1) automatic molding machine.
- (I) One (1) natural gas fired oil-sand core oven, rated at 0.100 million British thermal units per hour, capacity: 96 pounds of sand, core oil, water and binders per hour, total.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.6.1 Particulate [326 IAC 6-3-2]

- (a) Pursuant to 326 IAC 6-3-2, the allowable particulate emission rate from the core making operation shall not exceed 13.7 pounds per hour for a process weight rate of 6.05 tons per hour.
- (b) Pursuant to 326 IAC 6-3-2, the allowable particulate emission rate from the mold making operation shall not exceed 20.0 pounds per hour for a process weight rate of 10.66 tons per hour.
- (c) The pounds per hour limitations were calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$
 where $E =$ rate of emission in pounds per hour; and $P =$ process weight rate in tons per hour

(d) Pursuant to 326 IAC 6-3-2, the allowable particulate emission rate from the natural gas fired oil-sand core oven shall not exceed 0.551 pounds per hour for a process weight rate of 96 pounds per hour.

D.6.2 Particulate Matter [326 IAC 2-2]

The particulate matter and PM_{10} emissions from the core making operation shall not exceed 1.10 pounds per ton of metal produced, equivalent to 5.50 tons of PM and PM_{10} per year at the production limit of 10,000 tons of metal melted per twelve (12) consecutive month period to avoid the applicability of 326 IAC 2-2.

D.6.3 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

Any change or modification which may increase the potential to emit VOC to twenty five (25) tons per year from the natural gas fired oil-sand core oven shall require approval from IDEM, OAQ prior to making the change.

Akron Foundry, Inc. Akron, Indiana Permit Reviewer: MES

Compliance Determination Requirements

There are no compliance determination requirements for these emission units.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

There are no record keeping requirements for these emission units.

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Part 70 Minor Source Modification (MSM) and Minor Permit Modification

Source Background and Description

Source Name: Akron Foundry, Inc.

Source Location: 502 East Main Street, Akron, IN 46910 Mailing Address: 502 East Main Street, Akron, IN 46910

Responsible Official: David Ellenwood General Telephone Number: 219/893-4548

County Location: Fulton SIC Code: 3370

Source Categories: 1 of 28 Listed Source Categories

PSD Minor Source

Minor Source Modification: 049-17893-00001
Minor Permit Modification: 049-17953-00001
Permit Reviewer: Iryn Calilung

Permitting History

On December 28, 1999, the Office of Air Quality issued a Part 70 permit (049-5899-00001) to Akron Foundry for their gray iron foundry. This Part 70 operating permit established the entire source to be a PSD minor source by limiting the metal to be melted to 10,000 tons per 12-consecutive month period.

On January 14, 2000, a significant source modification (049-11484-00001) was issued to install a sand handling operation, an automatic molding machine and a manual rotolift machine. This modification did not change the status of the entire source by keeping the existing annual metal limitation of 10,000 tons per 12-consecutive month period. The existing Part 70 permit was not modified to incorporate these new units because the Part 70 was not issued yet during the review of these units. The units were incorporated into the Part 70 permit via the next approval issued.

On November 2, 2001, a minor source modification (049-14651-00001) was issued to install a natural gas fired oil-sand core oven. The approval (049-14865-00001) to operate this core oven was issued on November 20, 2001. The addition of this core oven did not change the status of the entire source by keeping the existing annual metal limitation of 10,000 tons per 12-consecutive month period.

On December 18, 2001, the OAQ opened the Part 70 permit to clarify that the annual compliance certification shall include information whether compliance was continuous or intermittent.

Existing Approvals

The table below shows the air approvals issued to this source:

Akron Foundry, IN.

Akron, IN

Permit Reviewer: Iryn Calilung

Permit Reviewer: Iryn Calilung

Permit Reviewer: Iryn Calilung

Table 1 Air Approvals		
Permit No.	Туре	Issuance Date
049-5899-00001	Part 70 Operating Permit	December 28, 1999
049-11484-00001	Significant Source Modification	January 14, 2000
049-14651-00001	Minor Source Modification	November 2, 2001
049-14865-00001	Minor Permit Modification	November 20, 2001
049-13292-00001	Re-opening	December 18, 2001

Description of the Proposed Project

On July 2, 2003, the OAQ received a letter from Akron Foundry indicating the following proposed modification:

- (1) Remove one (1) portable rotolift.
- (2) Remove two (2) portable floor squeezers.
- (3) Replace these removed units with an automatic molding unit.

The letter indicated that these removals of the mold making equipment and its replacement with an automatic mold making machine is to reduce costs and improve products. It was also indicated that since the existing annual metal limitation is being kept, these changes are to be considered administrative amendment only to the existing Part 70 source.

Integral Part of the Process

There is no evaluation requested or made in terms of control being considered as part of a process.

Increase Utilization

As previously indicated, the entire plant has an existing annual metal limitation to limit the source as a PSD minor source. This annual metal limitation is going to be maintained, therefore there is no increase in utilization expected. The intent of the mold replacement is to reduce cost and improve product quality.

Emission Calculations

Core making emissions are determined on a pound per ton of metal basis and since the existing annual metal limitation is being maintained and the same resin/catalyst will be used, it is not necessary to do an emission calculation of the new emission unit.

Page 3 of 7 TSD of MSM 049-17893-00001 and MPM 049-17953-00001

Permit Level Evaluation for the Modification

The following evaluation is being made to determine the level of approval for this mold making machine replacement.

- (1) 326 IAC 2-7-11 Part 70 Administrative Amendment A Part 70 operating permit can be amended if:
 - (a) Corrects typographical error -- clearly not applicable
 - (b) Source basic information change, such as telephone number, or change in ownership - clearly not applicable
 - (c) The permittee requires more frequent monitoring or reporting - clearly not applicable
 - (d) Revises descriptive information where the revision will not trigger a new applicable requirement or violate a permit term - not applicable because the mold making equipment is being replaced from being manual to automatic molding equipment and the change is accomplished by installing new unit.

Based on the above evaluations, the proposed changes can not be permitted under the Administrative Amendment option of 326 IAC 2-7 program.

(2) 326 IAC 2-7-10.5(a) Source Modification
Pursuant to 326 IAC 2-7-10.5(a), a Part 70 permittee proposing to construct new emission units or modify existing emission units shall submit an application for a modification.

Since Akron Foundry Inc. is going to construct new emission unit (automatic mold making machine) and modifies the existing unit (manual mold machine) by replacing them, the proposed modification is considered a source modification.

- (3) 326 IAC 2-7-10.5(b) Emission unit/control repair replacement Pursuant to 326 IAC 1-7-10.5(b), the Permittee may replace an emission unit/control without prior approval if:
 - (a) The PTE of the replacement is less or equal to the existing unit
 - (b) The replacement change is not a PSD major modification - the proposed modification is not PSD major because the annual metal limitation is being maintained.
 - (c) The permittee returns the emission unit to normal operation after an upset, malfunction or mechanical failure - not applicable because the intent of the replacement is reduce costs and improve the quality of products. The replacement is not being done because of an upset, malfunction or unavoidable scenarios.

Based on the evaluation above, the proposed replacement can not be permitted under this option.

- (4) 326 IAC 2-7-10.5(d)(8) Emission unit replacement
 - Pursuant to 326 IAC 2-7-10.5(d)(8), a part 70 source proposing to replace or repair a part or piece of equipment in an existing process as long as the replacement does not:
 - (a) Results in the replacement or reconstruction of an entire process - the proposed modification is replacing the mold making machine only.
 - (b) May result in an actual emissions - the annual metal limitation will be kept.
 - (c) Results in a significant net emissions increase - the annual metal limitation will

Permit Reviewer: Iryn Calilung

Page 4 of 7 TSD of MSM 049-17893-00001 and MPM 049-17953-00001

be kept, thus the replacement still maintain the PSD status of the source.

Based on the above evaluation, the proposed modification can be permitted under the Minor Source Modification option.

(5) 326 IAC 2-7-10.5(d)(9) Construction of similar unit
Pursuant to 326 IAC 2-7-10.5(d)(9), a Part 70 source may add an emission unit(s) of the
same type that are already permitted and that will comply with the same applicable
requirements and compliance monitoring - - the new unit (automatic mold making
machine) is similar to an existing permitted automatic mold making equipment in the
source and will comply to the same permit terms and conditions.

Based on the above evaluation, the proposed modification can be permitted under the Minor Source Modification option.

(6) 326 IAC 2-7-12(b) Minor Permit Modification
Pursuant to 326 IAC 2-7-12(b), the operation of the new automatic mold making machine will be incorporated in to the source's Part 70 permit by a minor permit modification.

County Attainment Status

The source is located in Fulton County. Table 5 shows the attainment status of Fulton County.

Table 5 Fulton County		
Pollutant	Status	
PM ₁₀	Attainment	
SO ₂	Attainment	
NO ₂	Attainment	
Ozone	Attainment	
СО	Attainment	
Lead	Attainment	

- (1) Volatile organic compounds (VOC) and Ozone VOC are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Fulton County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD) 326 IAC 2-2.
- (2) Criteria Pollutants
 Fulton County has been classified as attainment or unclassifiable for all the other pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (3) Fugitive Emissions
 Since this type of operation is one of the 28 listed source categories under 326 IAC 2-21(y)(1) and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive PM emissions are counted toward determination of PSD applicability.

Permit Reviewer: Iryn Calilung

Page 5 of 7 TSD of MSM 049-17893-00001 and MPM 049-17953-00001

Source Status

1 of 28 Listed Source Categories [326 IAC 2-2-1(y)(1)]
Akron Foundry is a minor stationary source because it is one of the 28 listed source categories and an annual metal limitation is set to limit the PTE of any regulated pollutants to less than 100 tons per year.

Federal Rule Applicability

- (1) New Source Performance Standards (NSPS)
 There is no applicable 40 CFR Part 60 (NSPS) that applies to this modification.
- (2) National Emission Standards for Hazardous Air Pollutants (NESHAP)
 There is no applicable 40 CFR Part 63 (NESHAP) that applies to this modification.
- (3) Prevention of Significant Deterioration (PSD) 40 CFR 52.21
 On March 3, 2003, the federal NSR reform under 40 CFR 52.21 became effective. The revisions provided new applicability provisions for PSD rules for baseline emissions determination, actual-to-projected-actual methodology, plant wide applicability limitations, clean units, and pollution control projects. None of these new provisions will change the final outcome of the PSD review on this proposed modification.

On March 3, 2003, US EPA published a notice for AConditional Approval of Implementation Plan: Indiana@in the Federal Register. This notice grants conditional approval to the PSD State Implementation Plan (SIP) under provisions of 40 CFR 51.166 and 40 CFR 52.770 while superceding the delegated PSD SIP authority under 40 CFR 52.793. The effective date for these provisions is April 2, 2003. Therefore, the PSD permits will be issued under the authority of 326 IAC 2-2 and will no longer be issued under the provision of 40 CFR 52.21 and 40 CFR 124.

The OAQ web site has been updated to include the SIP approval and information about the rulemaking. http://www.in.gov/idem/air/permits/psdapprovalhistory.html

The conditional approval of the PSD program can be found at: http://a257.g.akamaitech.net/7/257/2422/14mar20010800/edocket.access.gpo.gov/2003/03-5024.htm

(4) 40 CFR 64 (Compliance Assurance Monitoring)
There is no emission unit that has a PTE of 100 tons/year or more. Thus 40 CFR Part 64 does not apply.

State Rule Applicability

There is no change from the original applicable state requirements.

Compliance Determination and Monitoring

There is no change from the original compliance monitoring requirement.

Akron Foundry, IN. Akron, IN

Permit Reviewer: Iryn Calilung

Page 6 of 7 TSD of MSM 049-17893-00001 and MPM 049-17953-00001

Testing Requirements

There is no change from the original testing requirement.

Part 70 Permit Changes

- (1) The affected part of the existing Part 70 permit is Section D.6.
- (2) The units in this Section D.6 are as follows:
 - (i) One (1) core making operation consisting of three (3) manual shell machines, capacity: 100 pounds of sand per hour each and 6.0 tons per hour of metal.
 - (j) Manual molding machines, consisting of two (2) rotolifts, installed in 1984 and 1990, and eleven (11) portable floor squeezers, installed between 1950 and 1975, capacity: 10.66 tons of sand per hour, each.
 - (k) One (1) natural gas fired oil-sand core oven, rated at 0.100 million British thermal units per hour, capacity: 96 pounds of sand, core oil, water and binders per hour, total.
- (3) Based on the proposed replacement:
 - (i) Remove one (1) portable rotolift
 - (ii) Remove two (2) portable floor squeezers
 - (iii) Replace these removed units with an automatic molding unit, the following are the revisions, with the changes in strike out and bold fonts for emphasis:
 - (i) One (1) core making operation consisting of three (3) manual shell machines, capacity: 100 pounds of sand per hour each and 6.0 tons per hour of metal.
 - (j) Manual molding machines, consisting of two (2) one (1) rotolifts, installed in 1984 and 1990, and eleven (11) nine (9) portable floor squeezers, installed between 1950 and 1975, capacity: 10.66 tons of sand per hour, each.
 - (k) One (1) automatic molding machine.
 - (k-I) One (1) natural gas fired oil-sand core oven, rated at 0.100 million British thermal units per hour, capacity: 96 pounds of sand, core oil, water and binders per hour, total.
- (4) Applicable requirements have been updated as follows. There are no changes in the emission rates.
 - D.6.1 Particulate Matter (PM) [326 IAC 6-3-2]
 - (a) Pursuant to 326 IAC 6-3-2, The allowable particulate matter (PM) emissions rate from the core making operation shall not exceed 13.7 pounds per hour for a process weight rate of 6.05 tons per hour.
 - (b) Pursuant to 326 IAC 6-3-2, The allowable particulate matter (PM) emissions rate from the mold making operation shall not exceed 20.0 pounds per hour for a process weight rate of 10.66 tons per hour.

Akron Foundry, IN. Akron, IN

Permit Reviewer: Iryn Calilung

Page 7 of 7 TSD of MSM 049-17893-00001 and MPM 049-17953-00001

(c) The pounds per hour limitations were calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$
 where $E =$ rate of emission in pounds per hour; and $P =$ process weight rate in tons per hour

(d) Pursuant to 326 IAC 6-3-2, The allowable particulate matter (PM) emissions rate from the natural gas fired oil-sand core oven shall not exceed 0.551 pounds per hour for a process weight rate of 96 pounds per hour.

Recommendation

Based on the facts, conditions and evaluations made, OAQ recommends to the IDEM Commissioner that the preliminary findings in the MPM 049-17953-00001 be provided to the public for review.

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on July 2, 2003.

Conclusion

The construction of this proposed modification shall be subject to the conditions of the attached Part 70 SSM Permit No. 049-17893-00001.

The operation of this proposed modification shall be subject to the conditions of the attached proposed Part 70 SPM Permit No. 049-17953-00001.